

(FILE 'HOME' ENTERED AT 18:50:47 ON 19 SEP 2008)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE,
AQUALINE,

AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA, CAPLUS,

CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE,
DISSABS, DRUGB,

DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 18:51:13 ON 19
SEP 2008

SEA LACTOPEROXIDASE# AND CATION# AND ELUT### AND
#####FILTRA###

0* FILE ADISCTI

SEA LACTOPEROXIDASE# AND CATION# AND (ELUTE OR ELUTION)
AND (FI

2 FILE CABA
6 FILE CAPLUS
4 FILE IFIPAT
1 FILE MEDLINE
1 FILE PROMT
550 FILE USPATFULL
115 FILE USPAT2
5 FILE WPIDS
5 FILE WPINDEX

L1 QUE LACTOPEROXIDASE# AND CATION# AND (ELUTE OR
ELUTION) AND (FI

FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:04:44 ON 19 SEP 2008
L2 12 S L1
L3 10 DUP REM L2 (2 DUPLICATES REMOVED)

FILE 'HOME' ENTERED AT 19:05:12 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:17 ON 19 SEP 2008

FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:13:39 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:41 ON 19 SEP 2008

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:19741 CAPLUS <<LOGINID::20080919>>
DOCUMENT NUMBER: 140:76329

ENTRY DATE: Entered STN: 11 Jan 2004
TITLE: Milk protein isolated by using ***cation***
-exchange resin
INVENTOR(S): Soupe, Jerome
PATENT ASSIGNEE(S): Compagnie Laitiere Europeenne, Fr.
SOURCE: Fr. Demande, 23 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
INT. PATENT CLASSIF.:
MAIN: A23J003-08
SECONDARY: A61K038-00; A61K035-20; A61K038-40; A61P019-00;
A23C009-146
CLASSIFICATION: 17-8 (Food and Feed Chemistry)
Section cross-reference(s): 18, 63

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2841747	A1	20040109	FR 2002-8234	20020702
FR 2841747	B1	20040820		
CA 2490622	A1	20040115	CA 2003-2490622	20030630
WO 2004004482	A1	20040115	WO 2003-FR2015	20030630
W: BR, CA, JP, KR, PL, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
BR 2003005244	A	20040921	BR 2003-5244	20030630
EP 1523243	A1	20050420	EP 2003-762713	20030630
EP 1523243	B1	20070110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
ES 2280800	T3	20070916	ES 2003-762713	20030630
US 20060040025	A1	20060223	US 2005-519131	20050804
US 7247331	B2	20070724		
US 20080044544	A1	20080221	US 2007-757485	20070604
PRIORITY APPLN. INFO.:			FR 2002-8234	A 20020702
			WO 2003-FR2015	W 20030630
			US 2005-519131	A1 20050804

PATENT CLASSIFICATION CODES:

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

FR 2841747	ICM	A23J003-08
	ICS	A61K038-00; A61K035-20; A61K038-40; A61P019-00; A23C009-146
	IPCI	A23J0003-08 [ICM,7]; A23J0003-00 [ICM,7,C*];

A61K0038-00 [ICS,7]; A61K0035-20 [ICS,7]; A61K0038-40 [ICS,7]; A61P0019-00 [ICS,7]; A23C0009-146 [ICS,7];
A23C0009-00 [ICS,7,C*]

IPCR A23C0009-00 [I,C*]; A23C0009-146 [I,A]; A23J0001-00 [I,C*]; A23J0001-20 [I,A]; A23L0001-305 [I,C*];
A23L0001-305 [I,A]; A61K0038-17 [I,C*]; A61K0038-17 [I,A]; A61K0038-40 [I,C*]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]

ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

CA 2490622 IPCI A23J0001-20 [ICM,7]; A23J0001-00 [ICM,7,C*];
A23C0009-146 [ICS,7]; A23C0009-00 [ICS,7,C*];
A61K0038-17 [ICS,7]; A61K0035-20 [ICS,7]; A23L0001-305 [ICS,7]; A61K0038-40 [ICS,7]

IPCR A23C0009-00 [I,C*]; A23C0009-146 [I,A]; A23J0001-00 [I,C*]; A23J0001-20 [I,A]; A23L0001-305 [I,C*];
A23L0001-305 [I,A]; A61K0038-17 [I,C*]; A61K0038-17 [I,A]; A61K0038-40 [I,C*]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]

ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

WO 2004004482 IPCI A23J0001-20 [ICM,7]; A23J0001-00 [ICM,7,C*];
A23C0009-146 [ICS,7]; A23C0009-00 [ICS,7,C*];
A23L0001-305 [ICS,7]; A61K0035-20 [ICS,7]; A61K0038-40 [ICS,7]; A61K0038-17 [ICS,7]; A61K0008-98 [ICS,7];
A61K0008-96 [ICS,7,C*]

IPCR A23C0009-00 [I,C*]; A23C0009-146 [I,A]; A23J0001-00 [I,C*]; A23J0001-20 [I,A]; A23L0001-305 [I,C*];
A23L0001-305 [I,A]; A61K0038-17 [I,C*]; A61K0038-17 [I,A]; A61K0038-40 [I,C*]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]

ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

BR 2003005244 IPCI A23J0001-20 [ICM,7]; A23J0001-00 [ICM,7,C*];
A23C0009-146 [ICS,7]; A23C0009-00 [ICS,7,C*];
A23L0001-305 [ICS,7]; A61K0035-20 [ICS,7]; A61K0038-40 [ICS,7]; A61K0038-17 [ICS,7]

IPCR A23C0009-00 [I,C*]; A23C0009-146 [I,A]; A23J0001-00 [I,C*]; A23J0001-20 [I,A]; A23L0001-305 [I,C*];
A23L0001-305 [I,A]; A61K0038-17 [I,C*]; A61K0038-17 [I,A]; A61K0038-40 [I,C*]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]

EP 1523243 IPCI A23J0001-00 [I,C]; A23C0009-00 [I,C]; A23L0001-305 [I,C]; A61K0038-17 [I,C]; A61K0038-40 [I,C];
A23J0001-20 [I,A]; A23C0009-146 [I,A]; A23L0001-305 [I,A]; A61K0038-17 [I,A]; A61K0038-40 [I,A]

IPCR A23J0001-00 [I,C]; A23J0001-20 [I,A]; A23C0009-00
[I,C]; A23C0009-146 [I,A]; A23L0001-305 [I,C];
A23L0001-305 [I,A]; A61K0038-17 [I,C]; A61K0038-17
[I,A]; A61K0038-40 [I,C]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]
ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

ES 2280800 IPCI A23J0001-00 [I,C]; A23J0001-20 [I,A]; A23C0009-00
[I,C]; A23C0009-146 [I,A]; A23L0001-305 [I,C];
A23L0001-305 [I,A]; A61K0038-17 [I,C]; A61K0038-17
[I,A]; A61K0038-40 [I,C]; A61K0038-40 [I,A]
IPCR A23J0001-00 [I,C]; A23J0001-20 [I,A]; A23C0009-00
[I,C]; A23C0009-146 [I,A]; A23L0001-305 [I,C];
A23L0001-305 [I,A]; A61K0038-17 [I,C]; A61K0038-17
[I,A]; A61K0038-40 [I,C]; A61K0038-40 [I,A];
A61P0019-00 [I,C*]; A61P0019-00 [I,A]
ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

US 20060040025 IPCI C12G0003-08 [I,A]; C12G0003-00 [I,C*]; A23C0001-00
[I,A]; A23J0001-20 [I,A]; A23J0001-00 [I,C*];
A23L0002-38 [I,A]; A61K0047-00 [I,A]; C07K0001-18
[I,A]; C07K0001-00 [I,C*]

IPCR C12G0003-00 [I,C]; C12G0003-08 [I,A]; A23C0009-00
[I,C*]; A23C0009-146 [I,A]; A23J0001-00 [I,C*];
A23J0001-20 [I,A]; A23L0001-305 [I,C*]; A23L0001-305
[I,A]; A61K0038-17 [I,C*]; A61K0038-17 [I,A];
A61K0038-40 [I,C*]; A61K0038-40 [I,A]; A61P0019-00
[I,C*]; A61P0019-00 [I,A]

NCL 426/490.000; 426/580.000; 426/491.000; 426/271.000;
426/587.000; 426/588.000; 426/590.000; 514/775.000;
530/416.000

ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

US 20080044544 IPCI A23C0009-00 [I,A]

NCL 426/580.000

ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
A61K038/17A2; A61K038/40

ABSTRACT:

Milk protein isolates (>90% protein, with high lactoferrin and ***lactoperoxidase*** activity) are isolated from milk or whey by adsorption on a ***cation*** -exchange column and ***elution*** with a salt soln., followed by desalting and sterilization by ***filtration*** techniques. Thus, skim milk is passed through a SPEC 70 column and proteins adsorbed on the resin are eluted with 10% NaCl; ***ultrafiltration*** is used to conc. the proteins and remove the salt; microfiltration is used to sterilize the isolate (96.2% protein; 54% lactoferrin).

SUPPL. TERM: milk whey protein isolation ***cation*** exchange;
lactoferrin ***lactoperoxidase*** isolation milk
cation exchange

INDEX TERM: ***Ultrafiltration***
(desalting by; milk protein isolated by using
cation -exchange resin)

INDEX TERM: Osteoblast
(food supplement for growth stimulation of; milk protein
isolated by using ***cation*** -exchange resin)

INDEX TERM: Arthritis
Osteoporosis
Periodontium, disease
Rheumatic diseases
(food supplement for prevention of; milk protein isolated
by using ***cation*** -exchange resin)

INDEX TERM: Bone, disease
(fracture, food supplement for prevention of; milk
protein isolated by using ***cation*** -exchange
resin)

INDEX TERM: ***Filtration***
(microfiltration, sterilization by; milk protein isolated
by using ***cation*** -exchange resin)

INDEX TERM: ***Cation*** exchangers
Dietary supplements
Drug delivery systems
Health food
Milk
Whey
(milk protein isolated by using ***cation*** -exchange
resin)

INDEX TERM: Lactoferrins
ROLE: FFD (Food or feed use); PUR (Purification or
recovery); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)
(milk protein isolated by using ***cation*** -exchange
resin)

INDEX TERM: Proteins
ROLE: FFD (Food or feed use); PUR (Purification or
recovery); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)
(milk; milk protein isolated by using ***cation***
-exchange resin)

INDEX TERM: Growth disorders, animal
(retarded, food supplement for prevention of; milk
protein isolated by using ***cation*** -exchange

resin)

INDEX TERM: 7440-70-2, Calcium, biological studies

ROLE: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(food supplement contg.; milk protein isolated by using ***cation*** -exchange resin)

INDEX TERM: 9003-99-0P, ***Lactoperoxidase***

ROLE: FFD (Food or feed use); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(milk protein isolated by using ***cation*** -exchange resin)

INDEX TERM: 362594-80-7, SPEC 70

ROLE: NUU (Other use, unclassified); USES (Uses)
(milk protein isolated by using ***cation*** -exchange resin)

INDEX TERM: 7447-40-7, Potassium chloride, uses 7647-14-5, Sodium chloride, uses 7786-30-3, Magnesium chloride, uses 10043-52-4, Calcium chloride, uses

ROLE: NUU (Other use, unclassified); USES (Uses)
(protein ***elution*** with; milk protein isolated by using ***cation*** -exchange resin)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD.

- REFERENCE(S): (1) Anon; PATENT ABSTRACTS OF JAPAN 1996, V1996(10)
(2) Anon; PATENT ABSTRACTS OF JAPAN 1997, V1997(11)
(3) Burling, H; US 5149647 A 1992 CAPLUS
(4) Campina Melkunie Bv; WO 9313676 A 1993 CAPLUS
(5) Chiu, C; JOURNAL OF FOOD SCIENCE 1997, V62(5), P996
CAPLUS
(6) Hahn, R; JOURNAL OF CHROMATOGRAPHY A 1998, V795(2), P277
CAPLUS
(7) Rhone Poulenc Ind; FR 2443867 A 1980 CAPLUS
(8) Ronnie, M; US 6096870 A 2000 CAPLUS
(9) Sepragen Corp; WO 9915024 A 1999 CAPLUS
(10) Snow Brand Milk Prod Co Ltd; EP 0704218 A 1996 CAPLUS
(11) Snow Brand Milk Prod Co Ltd; JP 08165249 A 1996 CAPLUS
(12) Snow Brand Milk Prod Co Ltd; JP 09187250 A 1997 CAPLUS
(13) Snow Brand Milk Prod Co Ltd; EP 1010430 A 2000 CAPLUS
(14) Stephen, A; WO 9727757 A 1997 CAPLUS